



CCTO now sends digital exposure notifications to all contacts with a Last Date of Exposure as well as a Primary Phone and/or Email provided. This enhances existing workflows and can be used to provide an efficient single notification option to [certain contacts based on priority](#).

Automatic digital exposure notification is a helpful contact tracing enhancement that serves two purposes:

1. It **enhances existing workflows** by quickly helping contacts to learn of their exposure, to receive and share key info, and to begin accessing digital assessments. This expedites initial outreach but **will not prevent you from monitoring your contact normally or from contacting them by phone if needed**.
2. Depending on your local guidance, sending an exposure notification **may also take the place of an initial phone call** and/or of **ongoing monitoring**; [this supports prioritizing contact tracer time for the contacts most likely to have and spread disease](#).

Sending a Digital Exposure Notification

1. Contacts will receive a digital exposure notification automatically upon saving the profile if required fields are complete. Confirm **that you have completed and checked** these fields:
 - **First Name, Last Name, State, and County** (required CCTO fields)
 - **Last Date of Exposure to Source Patient #1**
 - **Email AND/OR Primary Phone** (one is required in order to send a notification)

*The notification will include an end-of-quarantine date (based on the date listed in the "Monitoring End Date" field) and a test date (5 days since the most recent last date of exposure). If no "Monitoring End Date" is listed, the system will auto-populate it to be 14 days since the most recent last date of exposure. **Please ensure that these dates are correct before sending a notification.***

The system is designed to send notifications automatically, so most tracers should have no reason to touch the **Send Notification?** toggle.

1

CR Christopher Robin

Contact - MDA Form

Complete and check key fields

ARIAS Contact Assessments All Activities Recent Monitoring History System Information Related

Contact Information

Country Code

Primary Phone (will be used for text messages) 1-777-888-9990

Phone #2

Phone #3

Email christopher.robin@woods.com

Preferred Method of Contact Phone Call

Resource Need Reported

Source Case Information

Ongoing Exposure No

NC-COVID Event ID of Source Patient #1 (Use the number) 188899900

Last Date of Exposure to Source Patient #1 1/20/2021

NC-COVID Event ID of Source Patient #2 (Use the number)

Hovering over **Last Date of Exposure to Source Patient #1** will present a message reminding you to use Case Interview Date if Last Date of Exposure is unknown.

NOTE ABOUT MINORS:

While minors may receive a digital exposure notification, **contacts must be 18 years of age or older** to provide information through the digital portal. *Parents or guardians can submit digital monitoring information on behalf of minors.*



2. When these required fields have been completed and saved, a **digital notification will be sent automatically**. Note that the **"Send Notification?"** toggle will move to **"Yes"** on its own as soon as the required information is entered, and the notification will send as soon as you save. No other action is required on your part. If information is removed from the required fields, **"Send Notification?"** will move to **"No."** The toggle will move back to **"Yes"** and a new notification will be sent if the required fields are replaced with new information.
3. You can confirm that a text and/or email was created by visiting the contact's **All Activities Page** and confirming that an email and/or text is visible. Additionally, the notification will be displayed in the **Assessments Page** as an entry marked **"Notification."**
4. You can also review whether a **text message** notification created was confirmed to be delivered or undelivered to a mobile phone number by reviewing the fields for **"Text Notification Status"** and **"Status Date."** These fields will only update once; therefore, texts labeled as **"Sent"** or **"Queued"** were not yet delivered at the time they were checked by the system (in **"Status Date"**) but still may have been subsequently delivered. *The system views for All Cases, All Cases Imported from NC COVID, My Team's Active Cases, and All Contacts and Cases have a column for "Text Notification Status."*

CRITERIA FOR AUTOMATICALLY SENDING OF A NOTIFICATION:

1. **Send Notification?** is set to **"No"**
2. **Phone** or **Email** and **Last Date of Exposure** are complete and there is a change to one of these fields (including the change from blank to filled upon contact creation)

Note that notifications send automatically between 8AM and 7PM only. Notifications sent outside this window will be sent first thing in the morning.

TIP: Auto-save occurs after 30 seconds of inactivity. Be careful to review **Monitoring End Date** when updating required fields, as this determines the quarantine dates sent to the contact.

2

Save your work

3

Confirm outreach/notification creation

4

Review text message status

TEXT NOTIFICATION STATUS:

- **Delivered:** Text successfully delivered.
- **Sent:** Text sent but delivery unknown as of timestamp.
- **Queued:** Text not yet sent as of timestamp.
- **Undelivered:** Text unsuccessful, likely due to landline.
- **Blank:** No text created.

2

Save your work

3

Confirm outreach/notification creation

4

Review text message status

COVID-19 Community Team Outreach Tool

Digital Exposure Notification in CCTO



Understanding the Contact Perspective

1. Contacts will receive a text or email message **that informs them of their exposure and their personal quarantine dates (see [appendix](#))**. It will also provide them with a **link to a digital portal landing page** with more details and testing info. This page asks them to **provide more information** by completing a CAPTCHA to proceed to the next page.
2. Contacts who complete the CAPTCHA will be asked to agree to participate in digital monitoring.
3. Contacts who opt in will then be asked **to provide the same personal, contact, and demographic info that they would provide on a normal initial outreach call**. *First Name, Last Name, DOB, State, County, and Email/Mobile Number (depending on Preferred Method of Contact) will be required.*
4. When contacts submit this form successfully, they will start to receive daily digital assessments via their preferred method of contact **until the end of their monitoring period as determined by the date in "Monitoring End Date."**

1 Contact opens message and clicks link

2 Contact opts in to monitoring

3 Contact provides information

4 Contact submits form and monitoring begins

Depending on your LHD's workflow, **contacts who complete these steps may or may not proceed to additional monitoring via phone.**

1 Public Health Notification inbox x

NC DHHS-ARIAS
to me

Hello Down,

This is the NC Covid Community Team. You have been exposed to Covid-19, and should quarantine (stay home and separate yourself from others) through 2021-01-29 and get tested on or around 2021-01-05.

Click this [DHHS NC](#) speak with a NC COVID-19

NC DHHS COVID-19

Contact opens message and clicks link

NCDHHS

Home | Search | English - | Sign in

Help slow the spread of Covid-19!

You are receiving this message because you have been in contact with someone with COVID-19, and we'd like to help make sure you and your family are healthy and have the resources, information, and support you may need at this time.

If you would like to talk to someone immediately, please call our COVID Response Team at 844-628-7223 and they can connect you to your Local Health Department.

Because you have been in contact with someone with COVID-19, we ask that you please stay at home and avoid contact with others in your household so that you can limit any potential spread of the virus and protect your loved ones until the date below. Information on quarantining can be found [here \(NC\)](#) and [here \(CDC\)](#).

Quarantine end date
11/25/2020

You should get tested on or around:
11/17/2020

Find a testing place [here](#).

To provide brief information to help us track disease transmission, enter the captcha code below and click the "Next" button below. Additionally, you may be contacted by telephone to gather additional information and ensure you have the resources you need to quarantine.

5 5 h 5 7 v
Generate a new image
Play the audio code

Enter the code from the image

Next

2 NCDHHS

Home | Search | English - | Sign in

The COVID-19 Community Team Outreach tool collects information to help make sure you and your family are healthy and have the resources, information, and support you may need at this time. Information you provide will remain confidential in accordance with state and federal law. Please indicate whether or not you are willing to participate (yes, I agree to participate; no, I do not want to participate) and click "Next".

Yes, I agree to participate.

By clicking "Next" below, you agree to the following terms and conditions: you are not seeking immediate medical attention; you are providing information required for information or contact tracing; you are providing information that will be kept confidential in accordance with state and federal law.

Previous Next

Contact opts in to monitoring

3 NCDHHS

Home | Search | English - | Sign in

The information requested below will only be used to contact you about your possible COVID-19 symptoms and to provide support to you and your loved ones. The information you provide will remain confidential in accordance with state and federal law.

Please note that questions with an asterisk are required.

Personal Information

First Name *
Colonel

Last Name *
Mustard

Date of Birth (DOB) *
1/1/2000

Address Line 1
123 Clue St

Address Line 2

Contact provides information

4 NCDHHS

Home | Search | English - | Sign in

Thank you for helping stop the spread of COVID-19!

By agreeing to participate in the COVID-19 Community Team Outreach tool, you agree that, together with other resources, helps the North Carolina Public Health Department respond to the current health emergency and strive to keep you, your family, your loved ones safe.

Contact submits form and monitoring begins



Reviewing Information Gathered from an Exposure Notification

1. If your contact has provided information in the portal, you will see that **"Last Assessment Date"** has been updated on their profile.
2. To see the information that your contact has provided in detail, **click into their Assessments Page and review the assessment marked "Notification."**
3. You can review information that your contact has provided against the information that was originally in their profile by **selecting the "Notification" page at the top of the assessment.**
4. The boxes marked **"Contact Provided"** show your contact's responses, and the boxes marked **"Original Contact"** show what was originally in their profile.
5. If your contact entered a last name that matched their last name in CCTO exactly, **"Contact Updated?"** will be set to **"Yes,"** and all new or changed information that they have provided has been updated automatically on their profile. If your contact's last name did not match exactly but you believe the information should still transfer to the contact record, please proceed to the next page.

1

Begin Monitoring Date

11/30/2020

Last Assessment Date

11/30/2020 12:52 PM

Review "Last Assessment Date"

2

Colonel Mustard

Contact - MDA Form

ARIAS Contact

Assessments

All Activities

Recent Monitoring History

View records below

Source Contact

Date

Created On

Local Health...

Assessmen...

Colonel Mustard

12/1/2020

12/1/2020 3:35 PM

Date

Notification

Open assessment marked "Notification"

3

Assessment

Notification

Suggested Exposures

System Information

Related

Assessment

Notification

Click "Notification" to review

4

Contact Provided Information

First Name

Colonel

Last Name

Mustard

Date of Birth (DOB)

1/1/2000

Primary Phone Number

5550001234

Email

testingforarias@gmail.com

Preferred Language

English

Original Contact Information

First Name

Colonel

Last Name

Mustard

Date of Birth (DOB)

11/12/2020

Primary Phone Number

Email

testingforarias@gmail.com

Preferred Language

Other

Review "Contact Provided" Info

5

Preferred Method of Contact

Email

Contact Updated?

Yes

Reviewed & wrong person

No

Review "Contact Updated?"

1

Review "Last Assessment Date"

2

Open assessment marked "Notification"

3

Click "Notification" to review

4

Review "Contact Provided" Info

5

Review "Contact Updated?"

NOTIFIED CONTACTS WHO DO NOT RESPOND:
A **Final Monitoring Outcome** for "Notification - No Response" is available for contacts who were sent a notification but did not complete any assessments (including the notification assessment). Please defer to your local protocol and defer to the Closing Out A Contact [job aid](#) for support.

NOTE: DEMOGRAPHIC INFO WILL NOT TRANSFER
Due to inefficiencies with the system, contact-provided demographic info will not automatically transfer onto profiles; however, you can still review this information and update these fields manually.



Handling Incorrect Mismatches on Notifications

You should only complete this process if explicitly instructed to do so. Check with your supervisor on local protocol.

A **mismatch** occurs when the last name that a contact submits in the digital portal does not match their original last name in CCTO (either in spelling or in upper/lowercase), and this stops their profile from updating automatically. If you believe the submitted info should still be paired with the contact, however, you can correct this.

1. If the last name that a contact entered in the digital portal does not match their original last name in CCTO, **"Contact Updated?"** will be set to **"No"** because the Tool considers this a mismatch. This means info that they have provided **did not** automatically transfer onto their profile and digital monitoring was not started.
2. Contacts labeled as a mismatch can quickly be identified and reviewed by selecting the view for **"Notification - Contact not updated"** in the Assessments Tab.
3. If you have determined that this is **not a true mismatch and that the contact's profile should be updated** with the info submitted, you can use a **flow** (automatic workflow) to do this in one step. After selecting your contact(s) from the **"Notification - contact not updated"** view, click **"Flow"** at the top of the screen.

1

"Contact Updated?" is set to "No"

2

"Notification - Contact not updated" view

3

Select contact(s) and click "Flow"

TRUE MISMATCHES:

Notifications received by the wrong person

- If **"Contact Updated?"** reads **"No"** and you have determined that the notification was received by the wrong person, **consult with your supervisor.**
- A field has been provided for **"Reviewed & wrong person"** that you may use to document this, but you should always discuss documentation and next steps with your supervisor.

1

000426677

Assessment

Notification Suggested Exposures System Information

Contact Provided Information

First Name Water

Last Name **Bottel**

Date of Birth (DOB) 12/10/1976

Primary Phone Number 5554445454

Email testingforarias@gmail.com

Preferred Language ---

"Contact Updated?" is set to "No"

First Name Water

Last Name **Bottel**

Date of Birth (DOB) 12/10/1976

Primary Phone Number ---

Preferred Method of Contact Email

Contact Updated? **No**

Reviewed & wrong person **No**

2

Show Chart Activate Deactivate Delete

Home Recent Pinned Apps Dashboards Contacts Households Assessments

Notification - Contact not updated

Auto # C_First Name First Name C_Last Name Last

A-0000426560 Mike

A-0000426651 Nancy

A-0000426652 Jennifer

✓ A-0000426677 Water Water Bottel

A-0000426720 Scott Scott September Sep

"Notification - Contact not updated" view

Note that the following are excluded from this view because these contacts should not be updated:

- If **"Contact Updated?"** reads **"No"** because the contact has opted in but not submitted any information.
- If **"Contact Updated?"** reads **"No"** AND **"Reviewed & wrong person"** (see box above) is set to **"Yes."**

3

Show Chart Activate Deactivate Delete Assign Share Email a Link

Notification - Contact not updated

Select contact(s) and click "Flow"

Manage Create a flow See your flows Run Workflow NC - Approve Contact Up...

A-0000426651 Nancy Nancy Drew Drew --- 12/31/1980 geo

A-0000426652 Jennifer Jennifer Kwiatkowski Kwiatkowski 9/25/1970 9/25/1970 jenniferk@... jkwiatkow... 1-704 NC - A

✓ A-0000426677 Water Water Bottel Bottel 12/10/1976 12/10/1976 testingfor... testingfor... ---

A-0000426720 Scott Scott September September 1/1/2001 1/1/2001 --- 1-520-582-46

A-0000426751 Sprint7-2 Sprint7 Glendening Glendening 9/15/1969 9/15/1969 --- ergbells@... 1-919-624-97

Continued onto next page...

COVID-19 Community Team Outreach Tool

Digital Exposure Notification in CCTO



Handling Incorrect Mismatches on Notifications

4. Choose **"NC - Approve Contact Update."**
5. The first time you run this flow, you will receive a dialogue that asks you to connect to the Common Data Service. You can approve any prompts you may receive, and you will see a green check mark when you have been connected.
6. Click **"Run Flow,"** and you will receive a confirmation message. All submitted contact info will be transferred automatically, and you can click **"Done."**

4 Choose "NC - Approve Contact Update"

5 Approve prompts

6 "Run Flow" and "Done"

CORRECT MULTIPLE MISMATCHES:

In addition to running this flow for one contact, you can also select multiple contacts in any assessment view and run the flow for several contacts at one time.

4

Choose "NC - Approve Contact Update"

✓ Auto # ↑	C_First Name	First Name	C_Last Name	Last Name	C_Date of Birth	Date of Birth	C_Date of Notification	Date of Notification	Testing for...	Testing for...	NC - A
A-0000426560	Mike	Mike	Hammer	Hammer	---	12/31/1980	ge...	12/31/1980	ge...	---	---
A-0000426651	Nancy	Nancy	Drew	Drew	---	12/31/1980	ge...	12/31/1980	ge...	---	---
A-0000426652	Jennifer	Jennifer	Kwiatkowski	Kwiatkowski	9/25/1970	9/25/1970	jenniferk@...	9/25/1970	jenniferk@...	1-704	NC - A
✓ A-0000426677	Water	Water	Bottle	Bottle	12/10/1976	12/10/1976	testingfor...	12/10/1976	testingfor...	---	---
A-0000426720	Scott	Scott	September	September	1/1/2001	1/1/2001	---	1/1/2001	---	1-520-582-46	---
A-0000426751	Sprint7-2	Sprint7	Glendening	Glendening	9/15/1969	9/15/1969	---	9/15/1969	---	1-919-624-97	---

5

Approve Contact Update

Connections and actions

Connections

Common Data Service Permissions

Actions

Common Data Service (current environment)

Get a record - This operation retrieves the specified record for an entity.

Update a record - This operation updates an existing record for an entity.

Approve prompts

6

Approve Contact Update

Run flow

Approve Contact Update

Owner: jhein@microsoft.com

This flow uses Common Data Service (current environment). [Review connections and actions](#)

Run flow Cancel

Done

Run flow

Approve Contact Update

Run flow

Your flow run successfully started. To monitor it, go to the [Flow Runs Page](#).

Done

"Run flow" and "Done"



APPENDIX: Full text of email and text message notification

Links below are not functional; actual links that contacts will receive to direct them to their unique landing pages (see [page 3](#)) will appear in the *formats* shown below.

FULL TEXT OF EMAIL:

Hello [CONTACT NAME HERE],

This is the NC Covid Community Team. You have been exposed to Covid-19, and should quarantine (stay home and separate yourself from others) through [DATE HERE PER "MONITORING END DATE" FIELD] and get tested on or around [DATE HERE PER 5 DAYS SINCE MOST RECENT LAST DATE OF EXPOSURE].

Click this [DHHS.NC.GOV](https://dhhs.nc.gov) link for quarantine and testing resources and to provide information for your local health department; call 844-628-7223 to speak with a NC Covid Community team member directly.

NC DHHS COVID Team

FULL TEXT OF TEXT MESSAGE:

[CONTACT NAME HERE], You were exposed to COVID-19 & should quarantine through [DATE HERE PER "MONITORING END DATE" FIELD]. Get tested on [DATE HERE PER 5 DAYS SINCE MOST RECENT LAST DATE OF EXPOSURE]. Info: [https://ncdhhs-outreach-
uat.powerappsportals.us/en-US/notification/?id=f9fe75d5-d14e-eb11-
a811-001dd8309ba3](https://ncdhhs-outreach-uat.powerappsportals.us/en-US/notification/?id=f9fe75d5-d14e-eb11-a811-001dd8309ba3) or 844-628-7223. -NC DHHS COVID Team